

lotis, but—taken together with the fact that also externally, apart from the size of the ears, there is no difference worth mentioning between *microtis* and *megalotis* (for even the colour of the single skin of *microtis*, on which Miller laid some stress in his description, is, according to Lyon, unreliable)—it certainly looks rather suspicious.

My argument is, briefly summed up, this:—As in two British Museum specimens of *Micronycteris hirsuta* (98. 10. 9. 13–14), preserved in alcohol, the ears, for some reason or other, have shrunk far below their natural size (my paper, *l. s. c.*); as in a series of Irish *Pipistrellus pipistrellus*, preserved in alcohol, recently shown to me, the ears, for some reason or other, have shrunk to little more than half their natural size; so, the only specimen known of *Micronycteris microtis*, which differs from *M. megalotis* in no essential external character but its curiously small ears, and the skull and dentition of which are indistinguishable from those of *M. megalotis*, may, very likely, be an example of this latter species with much shrunk ears. Whether my assumption is right or wrong cannot, I believe, be definitely proved, until further material is forthcoming from the type locality of *M. microtis*. If it is wrong, the case will stand as follows: the genus *Micronycteris*, as restricted by me, numbers four species; three of these (*M. megalotis*, *minuta*, *hirsuta*) have the ears proportionately quite of the same size, but differ in many important cranial, dental, and external characters; the fourth species (*M. microtis*) has extraordinarily small ears, *but is otherwise practically indistinguishable, cranially, dentally, and externally, from M. megalotis!* All is possible, but strange as the characters of this latter “species” look to me, I still think it safer, for the present, to leave the question as to its validity open to doubt.—KNUD ANDERSEN.]

LV. — *Descriptions of new Pyralidæ of the Subfamilies Hydrocampinæ and Scoparianæ.* By Sir GEORGE F. HAMPSON, Bart., B.A., F.Z.S., &c.

THE following paper is supplementary to my classification of these two subfamilies in the *Trans. Ent. Soc. Lond.* 1897, pp. 127–240, and the numbers prefixed to the species indicate their position in the genera there dealt with.

HYDROCAMPINÆ.

For *Mixophila*, Meyr., insert GARGELA, Wlk., xxix. 815 (1864), which has precedence.

(1.) GARGELA RENATUSALIS, insert (syn.) *Gargela sub-purella*, Wlk. xxix. 815 (1864).

(2 a.) *Gargela cuprealis*, sp. n.

♂. Head and thorax cupreous yellow mixed with some white; palpi white, the second and third joints with black bands; legs white, the fore tibiæ and the tarsi banded with black; abdomen yellowish, dorsally suffused with fuscous, the ventral surface white with black segmental lines and extremity. Fore wing cupreous yellow, the costal and terminal areas more or less suffused with fuscous; a dark antemedial line oblique from costa to submedian fold, then slightly incurved; a black discoidal point; an indistinct postmedial line excurved from costa to vein 4, then incurved; a dark terminal line; cilia cupreous, with dark line through them and whitish tips. Hind wing fuscous brown with a cupreous gloss; cilia cupreous, with a dark line through them and whitish tips; the underside white slightly tinged with brown, a black point at upper angle of cell, a more or less distinct dark postmedial line oblique from costa to vein 4, then curved inwards and sinuous to inner margin, a more or less diffused blackish terminal line; cilia white, with a dark line through them.

Hab. S.E. BORNEO (*Doherty*), 1 ♂; PULO LAUT (*Doherty*), 1 ♂ type. *Exp.* 14 mm.

(5.) *Gargela arcualis*, sp. n.

Mid tibiæ of male dilated, with fringe of long hair.

♂. Head and thorax silvery white; palpi above and antennæ tinged with orange-brown; tarsi banded with orange-brown; abdomen white, slightly tinged with brown on dorsum, the anal tuft with some fuscous hair. Fore wing silvery white; an oblique orange line from middle of costa to lower angle of cell, and two oblique lines from costa beyond middle to vein 5 near termen; a curved black-brown fascia from middle of inner margin to just before termen at vein 2, broken up into two spots above inner margin and one before termen, where there is some orange beyond it; a fine black terminal line from apex to vein 6; cilia dark

brown, with a golden gloss at middle and at tips towards apex. Hind wing white.

Hab. NEW GUINEA, Milne Bay (*Meek*), 2 ♂ type. *Exp.* 18 mm.

GENUS ARGYRACTIS.

As many species hitherto placed in *Cataclysta* belong to this genus, the following revision becomes necessary.

SECT. I.—Fore wing with veins 3, 4 stalked.

(1.) *Argyractis malayalis*, sp. n.

♀. Head, thorax, and abdomen whitish suffused with fulvous brown; abdomen with slight brown segmental bands; pectus and ventral surface of abdomen white. Fore wing whitish suffused with fulvous yellow and thickly irrorated with black-brown scales except terminal area; a slight diffused dark subbasal band; an oblique dark ante-medial line, defined by whitish on inner side and slightly angled outwards below costa and at median nervure; an oblique yellow discoidal lunule; a dark postmedial line forming a wedge-shaped mark on costa, oblique to vein 3, then retracted to discoidal lunule and again oblique, the area beyond it yellow suffused with brown on costal half before the wedge-shaped white subterminal band from costa, defined by black on outer side extending to vein 4, and followed by a diffused dark line angled inwards in submedian fold, below which there is a whitish mark on it; a blackish spot at apex and terminal series of minute dentate marks; cilia dark brown, with slight whitish line at base. Hind wing fulvous yellow, with oblique diffused blackish band from costa near base to torus; two fine oblique black medial lines filled in with white from costa to submedian fold, the area beyond them whitish thickly irrorated with black-brown; two fine black lines from costa beyond middle, very oblique to below apex, then sinuous and ending on termen at submedian fold; four black spots on medial part of termen, with black lunules before them, with white points on them between the spots; cilia black at base, with a bluish silvery gloss, yellowish at tips, with blackish patch at middle.

Hab. SELANGOR, Kuala Lumpur (*Durham*), 1 ♀ type. *Exp.* 22 mm.

SECT. II.—Hind wing with veins 3, 5 stalked.

(2.) *Argyractis bifascialis*, Rob. Ann. Lyc. N. Y. ix. p. 153, pl. iv. fig. 3.

Texas.

SECT. III.—Hind wing with veins 3, 5 from cell.

A. Abdomen of male with lateral fans of large scales at base covering tufts of long hair.

(3.) *Argyractis lophosomalis*, sp. n.

Head and thorax white mixed with some golden brown; abdomen white, with brown band on second segment, incomplete dorsally, and some brown on medial segments, the tufts of hair fuscous. Fore wing white; the base of costa golden brown, expanding into a small subbasal spot and patch before the antemedial line; a small subbasal spot below the cell and patch on inner area before the antemedial line, which is slightly excurved below costa and submedian fold; the medial costal area brown, with a blackish patch below it almost filling end of cell; postmedial line incurved from costa to vein 4, then retracted to below end of cell and outwardly oblique to inner margin near tornus, a large, oblique, oval, brown patch beyond it between vein 4 and tornus; a wedge-shaped brown subterminal band from costa to the oval patch; a fine black terminal line; cilia golden yellow, with fine black line at tips. Hind wing white, with waved antemedial brown band from discal fold to inner margin, followed by a fine medial black line angled outwards in submedian fold and on vein 1, some black irroration beyond it below costa, bounded below by a slight, oblique, waved line; terminal area golden yellow-brown from below apex to submedian fold, with slight brown line on its inner edge from discal fold to submedian fold and some silver scales on termen and in submedian interspace; a subterminal series of black points from vein 7 to 2 and four small spots on middle of termen; the underside white, with subterminal series of five black points on the veins.

Hab. S. BRAZIL, Orgau Mts., Tijuca (*Wagner*), 4 ♂ type. *Exp.* 20 mm.

(4.) *Argyractis danæalis*, sp. n.

Cataclysta opulentalis, Druce, Biol. Centr.-Am., Het. ii. p. 272 (part.), nec Led.

♂. Head, thorax, and abdomen orange-yellow; pectus,

legs, and ventral surface of abdomen whitish, the fore femora and tarsal joints with dark rings. Fore wing orange, the costal area suffused with fulvous; a diffused fulvous subbasal band; a nearly straight, erect, antemedial white line defined on each side by diffused fuscous; an oblique white postmedial band from costa to vein 3, where it nearly meets a subterminal white band from costa, the space between them filled in with rufous; a diffused rufous and whitish patch in extremity of submedian fold; cilia dark. Hind wing orange, with subbasal silvery marks below the cell and on inner margin and medial marks at end of cell and on inner margin; a faint rufous medial band; a terminal series of three deep chocolate-red conjoined, irregular, ocellate spots with silvery markings on and between them and slight white patch above the two upper spots; cilia fuscous, whitish at tips; the underside with the chocolate-red spots more broken up.

Hab. MEXICO, Tabasco, Teapa (*H. H. Smith*), 4 ♂ type, Godman-Salvin Coll. *Exp.* 12 mm.

B. Abdomen of male normal.

(5.) *Argyractis pervenustalis*, Hmps. Trans. Ent. Soc. 1897, p. 152.

W. Africa.

(6.) *Argyractis triopalis*, sp. n.

Head, thorax, and abdomen white slightly tinged with pale brown. Fore wing orange-yellow, the basal area and costal area to middle silvery whitish; a black subbasal point on inner margin; an oblique silvery-white wedge-shaped mark defined by a slight brown line from costa beyond middle to vein 3, its inner edge with black point at costa and curved downwards in upper end of cell; a subterminal silvery-white wedge shaped band from costa to vein 3, defined by diffused brown on inner side and by a slight brown line on outer; a terminal series of slight black striæ; cilia silvery white tinged with brown. Hind wing white; a broad orange-yellow band before the obliquely incurved brown medial line; two black subterminal lines, slightly excurved below costa, then incurved and ending at submedian fold; three large black ocelli on termen, with silvery-blue scales on and between them, connected by short oblique black lines and with black line from costa to subapical ocellus; cilia

white, fuscous at base beyond the ocelli and with fuscous tips.

Hab. SIERRA LEONE (*Clements*), 2 ♂, 2 ♀ type; NIGERIA, Old Calabar (*Crompton*), 3 ♀, Warri (*Roth*), 1 ♀. *Exp.* 14 mm.

(7.) *Argyroctis pentopalis*, sp. n.

♀. Head, thorax, and abdomen whitish tinged with yellow-brown; pectus and ventral surface of abdomen white. Fore wing white suffused in parts with yellow-brown and with pale yellow from upper angle of cell to middle of termen; a small subbasal brown mark on inner margin; a very indistinct diffused brown antemedial line; an indistinct oblique diffused brown medial line, slightly excurved at middle; postmedial line indistinct, very oblique from costa to vein 4, then retracted to upper angle of cell, oblique to submedian fold, where it is angled outwards, then retracted to inner margin; a white subterminal band defined on each side by brown from costa to vein 4, and an indistinct white spot defined by brown above tornus; a fine dark terminal line; cilia yellowish white. Hind wing white; an orange-yellow fascia from origin of vein 2 to tornus, with slight brownish mark below it on middle of inner margin and dark line beyond it from below costa to submedian fold; two black subterminal lines, excurved below costa and ending at submedian fold; five black ocelli on termen with silvery-blue centres, the upper and lower pairs conjoined and the lowest ocellus small; an oblique black line from outer subterminal line at costa to subapical ocellus; cilia brownish at base, silvery white at tips.

Hab. SIERRA LEONE (*Clements*), 2 ♀ type. *Exp.* 12-14 mm.

(8.) *Argyroctis chrysopalis*, sp. n.

Cataclysta opulentalis, Druce, Biol. Centr.-Am., Het. ii. p. 272 (part.), nec Led.

Head, thorax, and abdomen golden yellow tinged with fulvous; pectus, legs, and ventral surface of abdomen whitish. Fore wing orange-yellow, the costal area tinged with fulvous; an oblique, ill defined, silvery-white antemedial band; a whitish fascia in and beyond end of cell, interrupted by an oblique orange discoidal bar, defined on each side by brown; a white patch in submedian fold below end of cell, irrorated by some dark scales; an oblique wedge-shaped whitish band from costa to vein 4, with blackish spot

on its inner edge at costa, almost meeting a wedge-shaped white subterminal band, defined on each side by fuscous lines and ending at vein 4; a short silvery-white streak in terminal part of submedian fold; a dark terminal line; cilia whitish. Hind wing orange-yellow; an oblique silvery-white bar across end of cell; a series of four irregular ocellate black spots on termen, with golden metallic marks between them, the three upper spots defined above by a waved white band with two slight black striae on it below costa; cilia whitish.

Hab. Mexico, Tabasco, Teapa (*H. H. Smith*), 2 ♂ type, Godman-Salvin Coll. *E.sp.* 10 mm.

(9.) *Argyractis opulentalis*, Led. Wien. ent. Mon. 1863, p. 453, pl. xviii. fig. 17.

*Cataclysta divisa*lis, Wlk. xxxiv. 13:36.

Grenada, Colombia, Br. Guiana, Brazil.

(10.) *Argyractis aylesalis*, Wlk. xix. 952.

Brazil.

(11.) *Argyractis hamiferalis*, sp. n.

Cataclysta aalis, Druce, Biol. Centr.-Am., Het. ii. p. 272 (part.), nec Wik.

Head, thorax, and abdomen white irrorated with red-brown; palpi blackish; fore legs blackish in front; abdomen with brown dorsal spots on first three segments and slight segmental rings, the extremity yellow. Fore wing with the costal area rufous; the basal inner area whitish irrorated with rufous; a slight antemedial white line from costa to submedian fold defined on each side by brown, the area beyond it yellow on inner half; the end of cell whitish; two oblique brown discoidal striae, the outer continued as an oblique line to vein 3 near termen, where it is met by a brown line from costa near apex defined by white on outer side, thus forming a V-shaped mark, its apex filled in with white; a wedge-shaped white band defined on each side by brown lines from costa before apex to submedian fold, where it emits a short silvery streak inwards; termen golden yellow; cilia brown. Hind wing yellow, the inner area white, with some brown on vein 1 towards tornus and some brown irroration in end of cell; an oblique silver band across end of cell from below costa to submedian fold and another band beyond the cell; four conjoined black ocelli

on termen with metallic spots on them, defined above by a waved black line, before which is a white patch with fine, slightly irregular, oblique black line on it from below apex to vein 3; cilia white, brown towards apex.

Hab. MEXICO, Tabasco, Teapa (*H. H. Smith*), 1 ♂, 3 ♀: Vera Cruz, Atoyac (*H. H. Smith*), 2 ♂ type, Godman-Salvin Coll. *Exp.* 14 mm.

- (12.) *Argyroctis inaurata*, Cram. Pap. Exot. iv. p. 135, pl. ccclix. G.

Surinam.

- (13.) *Argyroctis æalis*, Wlk. xix. 953.

Cataglypha gemmiferalis, Led. Wien. ent. Mon. 1863, p. 454, pl. xviii. fig. 8.

Centr. America, W. Indies, Venezuela, Brazil.

- (14.) *Argyroctis pavonialis*, Hmps. Trans. Ent. Soc. 1897, p. 150.

Guadalupe, Brazil, Peru.

- (15.) *Argyroctis fulviciuctalis*, Hmps. Trans. Ent. Soc. 1897, p. 150.

Jamaica.

- (16.) *Argyroctis axis*, Hmps. Trans. Ent. Soc. 1897, p. 149.

W. Indies, Peru.

- (17.) *Argyroctis constellalis*, Hmps. Trans. Ent. Soc. 1897, p. 151.

Brazil.

- (18.) *Argyroctis niphoplagalalis*, Hmps. Trans. Ent. Soc. 1897, p. 136.

Panama, Dominica.

- (19.) *Argyroctis catenalis*, Guén. Delt. & Pyr. p. 267.

Mexico, Brazil.

- (20.) *Argyroctis leucogonialis*, sp. n.

Cataglypha cerrussalis, Druce, Biol. Centr.-Am., Het. ii. p. 273 (part.), nec Feld.

♀. Head and thorax rufous mixed with black and some

white; legs whitish; abdomen pale rufous, the ventral surface whitish. Fore wing deep rufous; the basal area, except costa, whitish thickly irrorated with large black scales; the medial area nearly pure white, with two small rufous spots on costa; the area in and beyond end of cell thickly irrorated with dark brown; a narrow oblique white band from costa beyond middle to vein 2, where it nearly meets a subterminal white band, thus forming a large V-shaped mark; a terminal orange band not quite reaching tornus; a dark brown spot at apex; cilia white, with series of brown points at base. Hind wing white; the basal area and the area from lower angle of cell to apex irrorated with black-brown; a series of about six small black spots on and just before termen from below apex to vein 2, with metallic scales between them and an irregularly waved dark line just before them; cilia white, with a slight dark line near base from apex to vein 1; the underside white, with series of five small black spots just before termen from apex to vein 2.

Hab. PANAMA, Chiriqui (*Champion*), 1 ♀ type, Godman-Salvin Coll. *Exp.* 24 mm.

(21.) *Argyractis albipunctalis*, Hmps. Trans. Ent. Soc. 1897, p. 152.

Madagascar.

(22.) *Argyractis superciliaris*, Hmps. Trans. Ent. Soc. 1897, p. 152.

Madagascar.

(23.) *Argyractis coloralis*, Guen. Delt. & Pyr. p. 265.

Mauritius.

(24.) *Argyractis cronialis*, Druce, Biol. Centr.-Am., Het. ii. p. 274, pl. lxiii. fig. 18.

Mexico.

(25.) *Argyractis longipennis*, sp. n.

Catadysta cronialis, Druce, Biol. Centr.-Am., Het. ii. p. 274 (part.).

♀. Grey; head and thorax tinged with brown. Fore wing long and narrow, with the costal half and middle of inner area suffused with brown, except for grey patches irrorated with fuscous in end of cell and beyond discocellulars; an obscure double medial line, highly angled and

sending a spur to termen at middle; a black-edged yellow discoidal lunule; a triangular fulvous patch on costa before apex, defined by a fine white line on inner side and a broad line on outer, its apex on the small wedge-shaped leaden spot at termination of the streak from medial line; a black-edged terminal yellow line. Hind wing with brown-edged silvery discoidal band, with yellow mark on its inner edge; the apical area strongly irrorated with black scales; seven black spots with silver spots between them on apical part of termen; the inner area slightly irrorated with black and with a brown mark near tornus.

Hab. MEXICO, Jalapa (*Trujillo*), 9 ♀, Godman-Salvin Coll.; Orizaba, Jalapa (*Schaus*), 1 ♀ type. *Exp.* 32 mm.

(26.) *Argyraclis fulicalis*, Clem. Pr. Ac. N. Sci. Phil. 1860, p. 217.

Cataclysta angulatalis, Led. Wien. ent. Mon. 1863, p. 486.

Cataclysta confusalis, Wlk. xxxiv. 1234.

U. S. A.

(27.) *Argyraclis annulalis*, Guen. Delt. & Pyr. p. 266.

Centr. America, Brazil.

(28.) *Argyraclis samealis*, Feld. Reis. Nov. pl. cxxxvi. fig. 14.

Brazil.

(29.) *Argyraclis gratalis*, Wlk. xxxiv. 1335.

Cataclysta cerussalis, Feld. Reis. Nov. pl. cxxxvi. fig. 8.

Mexico, W. Indies, Br. Guiana, Brazil.

(30.) *Argyraclis schistopalis*, sp. n.

Cataclysta æulis, Druce, Biol. Centr.-Am., Het. ii. p. 272 (part.), nec Wlk.

Head and thorax ochreous suffused with red-brown; abdomen ochreous slightly banded with brown. Fore wing whitish thickly irrorated with dark brown; the base of costal area suffused with brown; an antemedial whitish band defined on each side by indistinct brown bands on costal half and yellowish bands on inner half; two oblique brown discoidal striae; a rather oblique yellow fascia from below end of cell to termen; two wedge-shaped white bands from costa before apex to vein 3, where they nearly meet, defined on each side by brown and with yellow before, between, and

beyond them; cilia whitish tinged with brown. Hind wing white; the basal area tinged with brown; an oblique silver band across lower angle of cell, with some yellow before and beyond it; two slight somewhat irregular dark lines from costa near apex to lower angle of cell; four ocelli on termen between apex and vein 2, broken up into small black spots by metallic, somewhat annulate markings; cilia whitish tinged with brown.

Hab. MEXICO, Tabasco, Teapa (*H. H. Smith*), 2 ♂, 1 ♀ type, Godman-Salvin Coll. *Exp.* 14 mm.

(31.) *Argyractis capensis*, sp. n.

Head, thorax, and abdomen ochreous yellow; palpi with some blackish at side of second joint; tibiae, tarsi, and ventral surface of abdomen whitish. Fore wing ochreous yellow irrorated with brown; a diffused, oblique, ante-medial, fuscous-brown line; a medial brown line, oblique and defined by whitish on inner side from costa to median nervure, then inwardly oblique and with a yellow band on inner side; an oblique wedge-shaped yellow spot defined by blackish at end of cell; an oblique postmedial brown line from costa to vein 5, defined by whitish on outer side; a silvery-white subterminal band, with black line on its outer edge from costa to vein 4; a short silvery streak in extremity of submedian fold; the terminal area yellow; a terminal series of slight black points; cilia fuscous. Hind wing whitish; a subbasal band formed of two diffused brown spots; a medial yellow band, defined on each side by brown from below costa to inner margin near tornus, and slightly angled at submedian fold; postmedial area irrorated with black down to vein 2; two fine sinuous subterminal lines; four ocellate black spots on middle of termen, with some silvery blue on and between them and two fine black lines towards costa and the uppermost spot; the termen yellow towards tornus confluent with the postmedial band; cilia fuscous and silvery white.

Hab. MASHONLAND, Salisbury (*Marshall*), 1 ♂; NATAL, Pietermaritzburg (*Bowker*), 1 ♀; Durban, 1 ♀; CAPE COLONY, Annshaw (*Miss F. Barrett*), 1 ♀ type. *Exp.* 16-20 mm.

(32.) *Argyractis nandinalis*, sp. n.

♀. Head, thorax, and abdomen whitish suffused with fulvous yellow; abdomen with the ventral surface white. Fore wing whitish tinged with fulvous yellow; basal costal

area brown; a rather diffused brown antemedial band, angled outwards on median nervure, then incurved; an oblique white discoidal lunule defined by brown and with brown bar from it to costa; a diffused brown postmedial band defined by whitish on outer side, somewhat angled inwards below costa, then obliquely excurved to vein 3, interrupted to vein 2, then oblique and enclosing a whitish spot below submedian fold; a wedge-shaped white subterminal band, defined by brown on inner side and by a black line on outer, with small brown spot above it on costa and some diffused brown below it at tornus; a terminal series of black striae; cilia silvery white. Hind wing white; a diffused brown mark on middle of median nervure; a diffused yellow band beyond the cell from below costa to submedian fold, followed by a patch of black irroration; two fine, incurved, slightly waved, subterminal black lines between veins 6 and 2; three ocellate black spots on middle of termen, with some silvery-blue scales between them and a spot below them; cilia pale brown, black-brown beyond the ocelli.

Hab. BR. E. AFRICA, Eb URU (*Betton*), 1 ♀ type. *Exp.* 26 mm.

(33.) *Argyractis tetropalis*, sp. n.

Head, thorax, and abdomen yellowish white tinged with brown. Fore wing pale yellowish, with orange-yellow band before the antemedial line, the terminal area orange-yellow; basal part of costal area brown, interrupted by a pale striga representing the subbasal line; a brown subbasal point on inner margin; antemedial line double, brown, excurved from costa to submedian fold, then incurved; medial area irrorated with brown scales; postmedial line blackish, defined by white on outer side, oblique from costa to vein 4, then retracted to below costa and forming a wedge-shaped mark, then obliquely excurved to vein 1 and very oblique to inner margin, along which it runs to antemedial line; a subterminal white band, defined on each side by silvery grey from costa to vein 4 and a silvery spot above tornus; some minute black points on termen towards apex; cilia silvery grey. Hind wing white; an orange-yellow band tinged with brown before the double antemedial line, which is oblique from costa to submedian fold, then retracted to inner margin; costal half of medial area irrorated with black-brown scales, with traces of an obliquely curved line below costa; subterminal line double, black, slightly excurved below costa, then incurved and ending at submedian fold near termen;

two pairs of black ocelli on termen, with silvery-blue centres, a black line from costa to inner edge of subapical ocellus angled outwards below apex.

Hab. NIGERIA, Yorubaland, Ogbomoso (*Carter*), 2 ♂, 1 ♀ type. *Exp.* 10-14 mm.

(34.) *Argyractis ouyxalis*, Hmps. Trans. Ent. Soc. 1897, p. 149.

Mexico, W. Indies, Venezuela.

(35.) *Argyractis moniligeralis*, Led. Wien. ent. Mon. 1863, p. 454, pl. xviii. fig. 10.

W. Indies, Honduras, Colombia.

(36.) *Argyractis pyropalis*, Guen. Delt. & Pyr. p. 265.

Brazil.

(37.) *Argyractis cæsalis*, Wlk. xxix. 952.

Brazil.

(38.) *Argyractis insulalis*, Wlk. Trans. Ent. Soc. Lond. (3) i. p. 123.

Haiti, Brazil.

(39.) *Argyractis pantheralis*, Wlk. xvii. 442.

Brazil.

(40.) *Argyractis premalis*, Druce, Biol. Centr.-Am., Het. ii. p. 272, pl. lxiii. fig. 11.

Mexico, Brazil, Argentina.

(41.) *Argyractis albulalis*, sp. n.

♂. Head, thorax, and abdomen white; palpi and antennæ brownish; fore tibiæ and tarsi banded with brown; abdomen with dark brown dorsal band on second segment, the medial segments tinged with brown. Fore wing white, the costal area suffused with golden brown interrupted at places by white; the antemedial line represented by a brown patch on costa and oblique band from submedian fold to inner margin, followed by a slight medial line interrupted at middle; two oblique brown discoidal striæ; an oblique white band slightly defined by brown from costa beyond middle to vein 3, where it almost meets a similar subterminal band

with some silvery scales on its lower part, thus forming a V-shaped mark; a slight oblique dark striga from submedian fold beyond middle to inner margin; a slight silver streak above tornus. Hind wing white; two brown striæ on inner area above tornus; a yellow patch in and below end of cell, with brown point on its inner edge and oblique silver band followed by a brown band on its outer edge; two inwardly oblique dark lines from costa near apex to lower angle of cell, with black irroration between them; three black spots on medial part of termen, with incomplete metallic annuli on them, the lowest spot double.

Hab. JAMAICA, Runaway Bay (*Walsingham*), 1 ♂ type.
Exp. 16 mm.

(42.) *Argyractis subornata*, Hmps. Trans. Ent. Soc. 1897, p. 151.

Brazil, Argentina.

(43.) *Argyractis harpalis*, Snell. Tijds. v. Ent. xliii. p. 296, pl. xvii. fig. 1 (1900).

Hydrocampa endoralis, Druce, Biol. Centr.-Am., Het. ii. p. 275 (part.), nec Wlk.

Mexico, Guatemala, Costa Rica, Panama.

(44.) *Argyractis micropalis*, sp. n.

Hydrocampa endoralis, Druce, Biol. Centr.-Am., Het. ii. p. 275 (part.), nec Wlk.

♂. Head, thorax, and abdomen white, the thorax tinged in parts with brown, the tarsi with slight brown rings; abdomen with paired dorsal black spots on first segment. Fore wing white; subbasal black points on costa and inner margin followed by a larger black spot on inner margin; the first line medial, brown, angled outwards below costa, then oblique and with black point on it below the cell; the second line double, very obliquely excurved from costa to vein 4, then almost obsolete, strongly retracted and forming two small blackish spots in submedian fold, a triangular golden-brown patch beyond it from costa; a fine dark brown subterminal line bent outwards to apex and ending at vein 4, the base of cilia beyond it golden yellow, the cilia fuscous at tips except towards tornus. Hind wing white; a black subbasal point above inner margin; a fine curved black antemedial line; a blackish subterminal striga below costa with black point beyond it; three small black spots before middle of termen on a golden-yellow patch bounded on inner

side by an irregularly dentate brown line; a slight subapical dark striga with some golden yellow beyond it; the cilia with slight dark line through them from apex to submedian fold.

Hab. MEXICO, Tabasco, Teapa (*H. H. Smith*), 1 ♂ type, Godman-Salvin Coll. *Exp.* 12 mm.

(45.) *Argyractis lanceolalis*, Hmps. Trans. Ent. Soc. 1897, p. 110.

Brazil.

(46.) *Argyractis argentilinealis*, Hmps. Trans. Ent. Soc. 1897, p. 136.

Brazil.

(47.) *Argyractis parthenodalis*, sp. n.

♂. Head, thorax, and abdomen brown mixed with some white and black, the abdomen with slight whitish dorsal segmental lines. Fore wing white suffused and irrorated with golden brown leaving the medial area nearly pure white; a curved blackish subbasal line; antemedial line blackish, rather diffused, excurved below costa, then oblique; postmedial line defined by white on outer side, strong and black towards costa, very slightly angled outwards below costa, strongly and acutely angled outwards at vein 6, then retracted and angled inwards in submedian fold and again angled outwards above inner margin; a fine subterminal black line defined by white on inner side, bent outwards to apex, excurved at middle and slightly angled inwards in submedian fold; cilia yellowish at base, with a black line through them and whitish tips. Hind wing white; a diffused blackish antemedial band; a black medial line excurved at middle and inner margin; a sinuous black postmedial line with two diffused wedge-shaped black spots before it below costa, the area beyond it with some diffused blackish marks, the termen suffused with brown, with a fine black terminal line from apex to vein 2 and indented at discal fold.

Hab. ARGENTINA, Tucuman, Los Vasquez (*Dinelly*) 1 ♂ type. *Exp.* 12 mm.

(48.) *Argyractis iasusalis*, Wlk. xix. 951.

Cataclysta phoxopteralis, Snell. Tijds. v. Ent. xliii. p. 295, pl. xvi. ff. 11, 12 (1901).

Brazil.

(49.) *Argyrectis metazonalis*, sp. n.

♂. Head and thorax white almost entirely suffused with fuscous; third joint of palpi, tibiæ, and tarsi white; abdomen whitish, with the base, terminal segments, and slight segmental lines fuscous. Fore wing white almost entirely suffused with fuscous brown; a black discoidal lunule; an obliquely curved black band from costa before apex to middle of inner margin; a curved subterminal line from below apex; a terminal fulvous band defined by brown lines; cilia brown with black line through them, and black points towards apex. Hind wing white with subbasal and post-medial black bands, the latter arising from below costa; a terminal fulvous band edged by black lines and with two white and black ocelli below apex; cilia whitish with a black line through them.

Hab. BRAZIL, São Paulo. *Exp.* 18 mm. Type in Coll. Rothschild.

(50.) *Argyrectis nigerialis*, sp. n.

Fuscous black; abdomen with slight pale segmental dorsal bands. Fore wing with traces of oblique paler medial line slightly excurved at median nervure; a diffused black discoidal spot; a more distinct pale postmedial line oblique from costa to vein 3 near termen, then strongly dentate inwards and excurved again; an obscure apical fulvous patch with dark-edged leaden band on it from below costa to vein 5 and a small fulvous patch above tornus. Hind wing with obscure fulvous patch in cell and diffused black discoidal spot with indistinct pale sinuous line from it to inner margin; a dark-edged pale postmedial line angled outwards below costa and at vein 1, the area beyond it black with a fulvous terminal band with four silver and black ocelli on it.

Hab. NIGERIA, Warri (*Roth*), 1 ♂ type. *Exp.* 16 mm.

(51.) *Argyrectis leucostrialis*, sp. n.

♂. Head and thorax black-brown; abdomen whitish with diffused black-brown bands; legs whitish and black-brown. Fore wing black-brown; a whitish antemedial band formed by short streaks in the interspaces; a small white discoidal lunule; a whitish medial band formed by streaks in the interspaces from cell to inner margin; a curved postmedial band formed by short white streaks in the interspaces between veins 7 and 3, a bar in submedian interspace and point above inner margin; a subterminal band formed by

short white streaks in the interspaces; cilia whitish and dark brown. Hind wing white slightly tinged with brown; an indistinct double oblique brown antemedial line from below costa to above tornus, where it is met by a rather more distinct double sinuous postmedial line; a brown terminal line; cilia white with a dark line through them.

Hab. SIERRA LEONE (*Clements*), 1 ♂ type. *Exp.* 16 mm.

(52.) *Argyractis nymphulalis*, sp. n.

♂. Head and thorax fuscous brown; abdomen pale brownish. Fore wing fuscous brown; diffused whitish antemedial and medial shades; an obscure medial black line angled below costa and incurved below cell; the postmedial line strongly angled outwards at vein 5, then bent inwards to below angle of cell; a subterminal series of white points. Hind wing fuscous.

Hab. NATAL, Kimbolton (*Hutchinson*), 2 ♂ type. *Exp.* 18 mm.

(3.) *Eristena oligostigmalis*, sp. n.

Hind femora of male short with fringe of long hair behind; hind wing with the termen excised at discal fold, then lobed.

Head, thorax, and abdomen yellow mixed with white; palpi blackish at tips; fore femora and tibiæ above blackish; the fringe of hair on hind femora of male black and whitish. Fore wing orange; a white fascia below the cell extending just into its lower part and at base to vein 1, at extremity expanding to the postmedial band and to above inner margin near tornus; a black spot on costa above end of cell; a slightly incurved white band from costa beyond middle to above tornus, slightly defined on inner side by fuscous except towards costa; a white subterminal band defined by a fuscous line on inner side and a fine black line on outer, meeting the postmedial band above tornus; a fine black terminal line expanding into a spot at apex; cilia brownish white. Hind wing orange; an oblique white medial band from just beyond end of cell to just above middle of inner margin, defined by blackish lines on each side; a fine black terminal line interrupted by three small black spots between veins 5 and 2, the uppermost spot with a small white spot on inner side, the line very fine and double towards apex with a small white lunule on its inner side at apex; cilia white with a fuscous line near base from vein 5 to tornus.

Hab. ANDAMANS (*Rogers*), 1 ♂, 1 ♀ type. *Exp.* 20 mm.

(4.) *Eristena trigonalis*, sp. n.

♀. Head, thorax, and abdomen white tinged with yellow. Fore wing pale yellow; the costal area reddish brown to beyond middle, expanding into a triangular patch on discocellulars, with white streak before it in cell and defined on outer side by a white band; a very oblique brown line from middle of vein 1 to inner margin before middle; a silvery-white subterminal band defined on each side by fine fuscous lines from costa to submedian fold; a terminal series of black points; cilia silvery white. Hind wing with the basal half white, the terminal half pale yellow; a slight oblique black line beyond lower angle of cell from vein 5 to submedian fold; five small black spots on middle of termen defined on inner side by silvery-white lunules, then by a minutely waved brown line connected with costa by a silvery line, some orange on termen between the spots; cilia silvery white.

Ab. 1.—Fore wing with the area between the discoidal triangular patch and subterminal band red-brown.

Hab. N. GUINEA, Kapaur (*Doherty*), 4 ♂ type. *Exp.* 20 mm.

(4.) *Arxama ochracealis*, sp. n.

♀. Fore wing with ven 11 shortly stalked with 8, 9, 10.

Head and thorax pale brownish ochreous; abdomen ochreous white. Fore wing pale brownish; an indistinct, very oblique, sinuous, fuscous, antemedial line; a black discoidal point; an indistinct, irregularly dentate, postmedial line, bent outwards below costa and angled inwards in submedian fold; a terminal series of black points. Hind wing white slightly tinged with ochreous; traces of a curved postmedial line; a terminal series of black points.

Hab. N. BORNEO, Mt. Mulu (*Hose*). *Exp.* 26 mm. Type in Coll. Rothschild.

(5.) *Arxama cretacealis*, sp. n.

Hind wing with vein 5 from lower angle of cell and approximated to 4 for a short distance.

♂. Head, thorax, and abdomen white faintly tinged with brown; second joint of palpi at sides and maxillary palpi except tips black; fore and mid femora above with some black; tarsi banded with black above. Fore wing white, the costal area faintly tinged with rufous, the costal edge black; a black discoidal point; a slight white striga from

costa before apex with black points on each side of it at costa; a pale brownish terminal band suffused with silver; black terminal points at discal and submedian folds; cilia blackish and silvery at base, whitish at tips. Hind wing white faintly tinged with brown; a terminal series of blackish striae; the underside with slight discoidal point and curved postmedial line strongly bent inwards to costa.

Hab. SOLOMON IS., Florida (*Meek*), 1 ♂ type. *Exp.* 18 mm.

(34 a.) *Nymphula expatrialis*, sp. n.

♀. Head and thorax purplish fuscous; abdomen fuscous. Fore wing fuscous suffused with purplish grey, leaving obscure dark patches at base, an antemedial line bent outwards below median nervure; a discoidal patch with line from it to inner margin angled inwards on vein 1; a postmedial band expanding towards costa and slightly bent inwards at vein 2; a terminal band. Hind wing white, the inner margin fuscous; a subterminal band from costa to vein 2 confluent at apex with the terminal band which terminates before tornus.

Hab. NEW GUINEA, Humboldt Bay (*Doherty*), Milne Bay (*Meek*), 1 ♀; FERGISSON I. (*Meek*), 1 ♀ type. *Exp.* 30-40 mm.

(52 a.) *Nymphula polystictalis*, sp. n.

♀. Head, thorax, and abdomen white slightly tinged with brown; fore tarsi with slight fuscous rings. Fore wing white tinged with pale reddish brown except on costal and postmedial areas; a subbasal fuscous spot on costa; an antemedial fuscous spot on costa and traces of a diffused mark on vein 1; a fuscous discoidal spot; a fuscous postmedial band from costa to vein 4, then curved inwards and with diffused brown patch extending to lower angle of cell; a curved brown subterminal line, the area beyond it tinged with yellow; a fine brown terminal line; cilia brownish. Hind wing white tinged with pale brown; a series of six subterminal black spots between vein 7 and submedian fold; cilia pale brown.

Hab. RON I. (*Doherty*), 1 ♀; N. GUINEA, Milne Bay (*Meek*), 1 ♀ type. *Exp.* 20 mm.

(2.) *Symphonia albioculalis*, sp. n.

Antennæ of male annulate.

♂. Head, thorax, and abdomen black-brown, some white on frons and vertex of head; antennæ ringed white and

black; palpi black, white at base; pectus, legs, and ventral surface of abdomen white; fore tibiæ with brown band at extremity. Fore wing dark brown with a metallic-blue gloss, the medial area yellowish except towards costa; antemedial line dark, defined by yellowish on inner side; a quadrate white spot in end of cell defined by blackish on each side; postmedial line dark, defined by yellowish on outer side, expanding into a spot at costa, the line excurved between veins 5 and 2, then retracted to below angle of cell; cilia with whitish line at base, wholly white above tornus. Hind wing with the basal half pale yellowish, the terminal half dark brown with a metallic-blue gloss; two slight subbasal black spots; a black discoidal lunule; postmedial line dark, defined by yellowish on outer side, excurved between veins 5 and 2; cilia whitish at submedian interspace.

Hab. NIGERIA, Old Calabar (*Crompton, Sampson*), 3 ♂ type. *Exp.* 14 mm.

(1 a.) *Cataclysta euclidialis*, sp. n.

Antennæ of male much longer than fore wing; fore wing with a very large fovea in and below end of cell on underside; hind wing with vein 8 becoming coincident with 7.

♂. Head, thorax, and abdomen white tinged in parts with red. Fore wing whitish mostly suffused with red; an indistinct postmedial line from costa to vein 3. Hind wing white with diffused blood-red before and beyond a white postmedial band which is broad from costa to vein 2, where it is bent inwards, then narrower and oblique to termen at vein 1. Underside of fore wing white, subbasal, antemedial, medial, and postmedial red marks on costa, the medial part of costal area yellow; a large triangular yellow patch from costa beyond middle to vein 2 enclosing a wedge-shaped white patch from costa; a triangular red patch on termen between veins 5 and 2 with its apex at vein 6; hind wing white with faint brownish suffusion from costa towards apex.

♀. More suffused with red; hind wing wholly suffused with red except the base and postmedial band, which is narrower; cilia with a red line near base; underside of fore wing with the markings yellower and less red, yellow patches in middle of cell and below cell at middle and extremity, the costal area yellow towards apex; hind wing with yellowish patch on middle of costa and band across apical area.

Hab. NIGERIA, Old Calabar (*Sampson*), 1 ♂ type, Sapele (*Sampson*), 1 ♀. *Exp.* 18 mm.

(26 a.) *Cataclysta melatornalis*, sp. n.

♀. Head and thorax pale brown; legs whitish tinged with brown; abdomen whitish mixed with brown and with slight dark segmental lines. Fore wing pale yellow-brown slightly irrorated with black; an oblique black striga near base of inner margin, a point in discal fold near end of cell and a small discoidal spot above angle of cell; traces of a punctiform postmedial line oblique from costa to vein 5, then subterminal; a small wedge-shaped white mark from costa before apex, followed by a slight whitish line defined on each side by fuscous and slightly excurved at discal fold; termen with slight punctiform black line. Hind wing whitish suffused with pale brown and irrorated with fuscous; some black scales at base of inner margin; two indistinct diffused antemedial lines, blacker towards inner margin; an indistinct diffused postmedial line excurved in submedian interspace, ending in a black patch at tornus; two indistinct fuscous subterminal lines before middle of termen; a narrow terminal fuscous band; cilia fuscous with fine white line at base.

Hab. S. BRAZIL, Organ Mts., Tijuca (*Wagner*), 1 ♀ type.
Exp. 22 mm.

[To be continued.]

LVI.—*Note on Dolichthys stellatus, Sauvage.*

By L. S. BERG (St. Petersburg).

IN the 'Revue et Magasin de Zoologie,' (3) t. ii. 1874, p. 336, Sauvage has described a new genus of Gobioid fish from the Don at Voronesh (S. Russia), which he names *Dolichthys stellatus*. It is clearly seen from the description that we have here to do with a fish described in 1787 by Pallas (Nov. Acta Acad. Petr. i. p. 52, pl. vii. figs. 4-6) from the Caspian Sea under the name of *Gobius macrocephalus*, and regarded by Eichwald (Bull. Soc. Nat. Moscou, 1838, no. 2, p. 139) as a type of a distinct genus, *Benthophilus*. This fish is widely distributed on the shores of the Caspian Sea, Black Sea, and the Sea of Asov, especially at the mouths of the South-Russian rivers, often entering fresh water. I myself have seen it in the Dniester at Bendery. The specimens described by Sauvage belong to the subspecies, found in the basin of the Black Sea, named by Kessler ('Fishes of the Aralo-Caspio-Pontine Region,' St. Petersburg, 1877, pp. 40-45) *Benthophilus macrocephalus*, variety *c*.

Ann. & Mag. N. Hist. Ser. 7. Vol. xviii. 29